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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/705,662	11/10/2003	Alfred D. Commins	SST/1367	6146
28554 7590 08/21/2007 VIERRA MAGEN MARCUS & DENIRO LLP 575 MARKET STREET SUITE 2500 SAN FRANCISCO, CA 94105			EXAMINER SPAHN, GAY	
			ART UNIT 3635	PAPER NUMBER
			MAIL DATE 08/21/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/705,662	Applicant(s) COMMINS ET AL.	
	Examiner Gay Ann Spahn	Art Unit 3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 23-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 23-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>4/24/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Appeal Brief

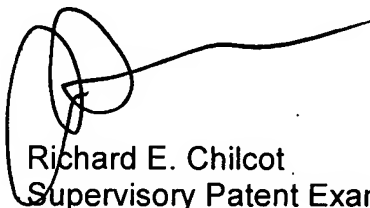
In view of the Appeal Brief filed on 14 May 2007, PROSECUTION IS HEREBY REOPENED. A non-final rejection of claims 1 and 23-30 is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:



Richard E. Chilcot
Supervisory Patent Examiner

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 24 April 2007 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement has been considered by the examiner.

Specification

The disclosure is objected to because of the following informalities:

(1) in the Preliminary Amendment filed on 10 November 2006, Applicants amended the specification at page 1, line 2, to include the sentence "This application is a continuation of copending application 08/873,972, filed June 12, 1997." This sentence should not be in the "BACKGROUND OF THE INVENTION" section, but instead should be above the "BACKGROUND OF THE INVENTION" section in its own section entitled --CROSS-REFERENCE TO RELATED APPLICATIONS--. Further, the sentence should be changed and updated to as follows: --This application is a continuation of copending U.S. Patent Application Serial No. 08/873,972, filed June 12, 1997, now U.S. Patent No. 6,643,986.--;

(2) page 9, line 7, reference numeral "23" should be changed to --22--;

(3) page 9, line 9, the "b" at the end of the line should be changed to --be--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by UTZMAN (U.S. Patent No. 5,870,870 on Information Disclosure Statement filed 09 December 2004).

As to claim 1, UTZMAN discloses that in a diaphragm for resisting lateral forces imposed on a building structure, an improved mechanical connection between a structural panel in said diaphragm and the framing members supporting said structural panel, said improved mechanical connection comprising:

said structural panel (2 in Fig. 1) having a distal side (side of 2 facing away from framing members 3), a proximal side (side of 2 facing away from framing members 3), and a plurality of edge faces (faces perpendicular to top, bottom, and side edges of panel 2);

said plurality of framing members (3, 3) disposed in registration with said proximal side of said structural panel (2) near said edge faces;

a plurality of perimeter fasteners (1, 1) connecting said structural panel (2) to said framing members (3, 3); and

means (plate steel 9 - see col. 6, line 62) for reducing bending (see col. 4, lines 44-45) of said perimeter fasteners (1, 1) attached to a substantial number of said

perimeter fasteners (1, 1), said means (9) for reducing bending of said perimeter fasteners (1, 1) acting when said lateral forces are imposed on said building structure.

Claims 1, 23, 24, and 27-29 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 57-1-6810 (Japanese Patent Application Publication No. JP 57-106810 on Information Disclosure Statement filed 24 April 2007).

As to claim 1, JP 57-1-6810 discloses that in a diaphragm for resisting lateral forces imposed on a building structure, an improved mechanical connection between a structural panel in said diaphragm and the framing members supporting said structural panel, said improved mechanical connection comprising:

said structural panel (1 in Figs. 1 and 3) having a distal side (top side in Figs. 1 and 3), a proximal side (bottom side in Figs. 1 and 3), and a plurality of edge faces (faces perpendicular to top, bottom, and side edges of panel 1);

said plurality of framing members (3, 3) disposed in registration with said proximal side of said structural panel (1) near said edge faces;

a plurality of perimeter fasteners (4, 4) connecting said structural panel (1) to said framing members (3, 3); and

means (2) for reducing bending of said perimeter fasteners (4, 4) attached to a substantial number of said perimeter fasteners (4, 4), said means (2) for reducing bending of said perimeter fasteners acting when said lateral forces are imposed on said building structure.

As to claim 23, JP 57-1-6810 discloses that in a diaphragm for resisting lateral forces imposed on a building structure, an improved mechanical connection comprising:
a plurality of structural panels (1, 1, 1), each having a distal side (top side in Figs. 1 and 3), a proximal side (bottom side in Figs. 1 and 3), and a plurality of edge faces (faces perpendicular to top, bottom, and side edges of panel 1);

a first elongated framing member (left 3 in Fig. 3) disposed in registration with said proximal sides of said structural panels (1, 1, 1) near one of said edge faces of each of said structural panels (1, 1, 1);

one or more second elongated framing members (right 3 in Fig. 3) disposed in registration with said proximal sides of said structural panels (1, 1, 1) near a different one of said edge faces of each of said structural panels (1, 1, 1);

a plurality of perimeter fasteners (4, 4) connecting each of said structural panels (1, 1, 1) to said first elongated framing member (3), said perimeter fasteners (4, 4) not passing all the way through said first elongated framing member (3 - see Fig. 3); and

means (2) for reducing bending of said perimeter fasteners (4, 4) attached to at least several perimeter fasteners (4, 4, 4) of said plurality of perimeter fasteners (4, 4, 4, 4) connecting each of said structural panels (1, 1, 1) to said first elongated framing member (3), said means (2) for reducing bending of said perimeter fasteners (4, 4) acting when said lateral forces are imposed on said building structure, said means (2) for reducing bending of said perimeter fasteners (4, 4,) having portions disposed on said distal sides of said structural panels (1), and said means (2) for reducing bending of

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said perimeter fasteners (4, 4) not extending substantially beyond said first elongated framing member (3).

As to claim 24, JP 57-1-6810 discloses the connection of claim 23 as discussed above, and JP 57-1-6810 also discloses that said plurality of perimeter fasteners (4, 4) are closely spaced (see Fig. 3).

As to claim 27, JP 57-1-6810 discloses the connection of claim 23 as discussed above, and JP 57-1-6810 also discloses that said means (20 for reducing bending of said perimeter fasteners (4, 4) consists of a perimeter edging member (2), said perimeter edging member (2) being disposed near said edge face of said structural panels (1, 1) to which said first elongated member (3) is attached.

As to claim 28, JP 57-1-6810 discloses the connection of claim 27 as discussed above, and JP 57-1-6810 also discloses that said perimeter edging member (2) is formed as an elongated member with a first face member (bottom face of 2).

As to claim 29, JP 57-1-6810 discloses the connection of claim 28 as discussed above, and JP 57-1-6810 also discloses that said first face member (bottom face of 2) of said perimeter edging member (2) is disposed on said distal sides (top of 1) of said structural panels (1, 1) near said edge faces of said structural panels (1, 1).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 57-1-6810 (Japanese Patent Application Publication No. JP 57-106810 on Information Disclosure Statement filed 24 April 2007) in view of FEE ET AL. (U.S. Patent No. 4,918,900).

As to claim 25, JP 57-1-6810 discloses the connection of claim 24 as discussed above.

JP 57-1-6810 fails to explicitly disclose that said plurality of perimeter fasteners are spaced approximately 2" apart in a direction generally parallel to said edge faces of said structural panels to which said first elongated framing member is connected.

FEE ET AL. discloses that said plurality of perimeter fasteners (33, 33) are spaced approximately 2" apart (see col. 5, lines 32-34) in a direction generally parallel to said edge faces of said structural panels (10) to which said first elongated framing member (31) is connected.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the connection of JP 57-106810 by making the perimeter fasteners be spaced approximately 2" apart in a direction parallel to the edge faces of the structural panels as taught by FEE ET AL. in order that the underlying structural panel is tightly connected to the frame.

As to claim 26, JP 57-1-6810 in view of FEE ET AL. discloses the connection of claim 25 as discussed above, and FEE ET AL. also disclose that said structural panels (10) are made from wood (26, 42 in Fig. 2 - see col. 3, lines 49-50, and col. 6, line 49).

Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 57-1-6810 (Japanese Patent Application Publication No. JP 57-106810 on Information Disclosure Statement filed 24 April 2007) in view of SCHNELLER (U.S. Patent No. 3,775,920 on Information Disclosure Statement filed 09 December 2004).

As to claim 30, JP 57-1-6810 discloses the connection of claim 29 as discussed above.

JP 57-1-6810 fails to explicitly disclose that said means for reducing bending of said perimeter fasteners is made from light gauge, sheet metal.

SCHNELLER discloses that said means (41) for reducing bending of said perimeter fasteners (40) is made from light gauge, sheet metal (see col. 2, line 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the connection of JP 57-106810 by making the means for reducing bending of the perimeter fasteners be made from light gauge, sheet metal as taught by SCHNELLER in order to provide a strong, yet lightweight means for reducing bending.

Claims 1, 23, 24, and 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over TIMMERMAN, SR. ET AL. (U.S. Patent No. 6,244,004 on Information Disclosure Statement filed 09 December 2004) in view of PARSLOW (U.S. Patent No. 2,725,608).

As to claim 1, TIMMERMAN, SR. ET AL. disclose that in a diaphragm for resisting lateral forces imposed on a building structure, an improved mechanical connection between a structural panel in said diaphragm and the framing members supporting said structural panel, said improved mechanical connection comprising:

said structural panel (102 in Prior Art Fig. 3) having a distal side (top of 102), a proximal side (bottom of 102), and a plurality of edge faces (faces perpendicular to distal and proximal sides);

said plurality of framing members (104, 108, 114, 116) disposed in registration with said proximal side of said structural panel (102) near said edge faces;

a plurality of perimeter fasteners (122, 122) connecting said structural panel (102) to said framing members (104, 108, 114, 116)

TIMMERMAN, SR. ET AL. fails to explicitly disclose means for reducing bending of said perimeter fasteners attached to a substantial number of said perimeter fasteners, said means for reducing bending of said perimeter fasteners acting when said lateral forces are imposed on said building structure.

PARSLOW discloses means (40 in Figs. 1-4) for reducing bending of said perimeter fasteners (48, 48) attached to a substantial number of said perimeter fasteners (48, 48), said means (40) for reducing bending of said perimeter fasteners (48, 48) acting when said lateral forces are imposed on said building structure.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the connection of TIMMERMAN, SR. ET AL. by including means for reducing bending of said perimeter fasteners attached to a substantial

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number of said perimeter fasteners as taught by PARSLOW in order to protect the edges of the structural panel.

As to claim 23, TIMMERMAN, SR. ET AL. disclose that in a diaphragm for resisting lateral forces imposed on a building structure, an improved mechanical connection comprising:

a plurality of structural panels (adjacent 102, 102 on side of building adjacent shear wall 101 shown in Prior Art Fig. 3), each having a distal side (top of 102), a proximal side (bottom of 102), and a plurality of edge faces (faces perpendicular to distal and proximal sides);

a first elongated framing member (any of 104, 106, 108, and 116) disposed in registration with said proximal sides of said structural panels (102, 102) near one of said edge faces of each of said structural panels (102, 102);

one or more second elongated framing members (another of 104, 106, 114, 116) disposed in registration with said proximal sides of said structural panels (102, 102) near a different one of said edge faces of each of said structural panels (102, 102);

a plurality of perimeter fasteners (122, 122) connecting each of said structural panels (102, 102) to said first elongated framing member (any of 104, 106, 114, 116), said perimeter fasteners (122, 122) not passing all the way through said first elongated framing member (any of 104, 106, 114, 116).

TIMMERMAN, SR. ET AL. fail to explicitly disclose means for reducing bending of said perimeter fasteners attached to at least several perimeter fasteners of said plurality of perimeter fasteners connecting each of said structural panels to said first

elongated framing member, said means for reducing bending of said perimeter fasteners acting when said lateral forces are imposed on said building structure, said means for reducing bending of said perimeter fasteners having portions disposed on said distal sides of said structural panels, and said means for reducing bending of said perimeter fasteners not extending substantially beyond said first elongated framing member.

PARSLOW discloses means (40 in Figs. 1-4) for reducing bending of said perimeter fasteners (48, 48) attached to at least several perimeter fasteners (48, 48) of said plurality of perimeter fasteners (48, 48) connecting each of said structural panels (30, 30) to said first elongated framing member (16 and/or 14), said means (40) for reducing bending of said perimeter fasteners (48, 48) acting when said lateral forces are imposed on said building structure, said means (40) for reducing bending of said perimeter fasteners (48, 48) having portions (42) disposed on said distal sides of said structural panels (30, 30), and said means (40) for reducing bending of said perimeter fasteners (48, 48) not extending substantially beyond said first elongated framing member (16 and/or 14).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the connection of TIMMERMAN, SR. ET AL. by including means for reducing bending of said perimeter fasteners attached to a substantial number of said perimeter fasteners, wherein the means for reducing bending has portions disposed on the distal sides of the structural panels as taught by PARSLOW in order to protect the edges of the structural panel.

As to claim 24, TIMMERMAN, SR. ET AL. in view of PARSLOW disclose the connection of claim 23 as discussed above, and both TIMMERMAN, SR. ET AL. and PARSLOW also discloses that said plurality of perimeter fasteners (122 in TIMMERMAN, SR. ET AL.; and 48 in PARSLOW are closely spaced.

As to claim 27, TIMMERMAN, SR. ET AL. in view of PARSLOW disclose the connection of claim 23 as discussed above, and PARSLOW also discloses that said means (40) for reducing bending of said perimeter fasteners (48, 48) consists of a perimeter edging member (41, 42), said perimeter edging member (41, 42) being disposed near said edge face of said structural panels (30) to which said first elongated member (16 and/or 14) is attached.

As to claim 28, TIMMERMAN, SR. ET AL. in view of PARSLOW disclose the connection of claim 27 as discussed above, and PARSLOW also discloses that said perimeter edging member (41, 42) is formed as an elongated member with a first face member (42).

As to claim 29, TIMMERMAN, SR. ET AL. in view of PARSLOW disclose the connection of claim 28 as discussed above, and PARSLOW also discloses that said first face member (42) of said perimeter edging member (41, 42) is disposed on said distal sides of said structural panels (30, 30) near said edge faces of said structural panels (30).

As to claim 30, TIMMERMAN, SR. ET AL. in view of PARSLOW disclose the connection of claim 30 as discussed above, and PARSLOW also discloses that said

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means (40) for reducing bending of said perimeter fasteners (48, 48) is made from light gauge, sheet metal (col. 2, lines 28-33).

Claims 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over TIMMERMAN, SR. ET AL. (U.S. Patent No. 6,244,004 on Information Disclosure Statement filed 09 December 2004) in view of PARSLOW (U.S. Patent No. 2,725,608), as applied to claim 24 above, and further in view of FEE ET AL. (U.S. Patent No. 4,918,900).

As to claim 25, TIMMERMAN, SR. ET AL. in view of PARSLOW disclose the connection of claim 24 as discussed above.

Neither TIMMERMAN, SR. ET AL. nor PARSLOW disclose that said plurality of perimeter fasteners are spaced approximately 2" apart in a direction generally parallel to said edge faces of said structural panels to which said first elongated framing member is connected.

FEE ET AL. discloses that said plurality of perimeter fasteners (33, 33) are spaced approximately 2" apart (see col. 5, lines 32-34) in a direction generally parallel to said edge faces of said structural panels (10) to which said first elongated framing member (31) is connected.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the connection of TIMMERMAN, SR. ET AL. in view of PARSLOW by making the perimeter fasteners be spaced approximately 2" apart in a

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direction parallel to the edge faces of the structural panels as taught by FEE ET AL. in order that the underlying structural panel is tightly connected to the frame.

As to claim 26, TIMMERMAN, SR. ET AL. in view of PARSLOW and FEE ET AL. disclose the connection of claim 25 as discussed above, and both PARSLOW and FEE ET AL. also discloses that said structural panels (wallboard 30 of PARSLOW; and 26, 42 in Fig. 2 in FEE ET AL. (see col. 3, lines 49-50, and col. 6, line 49)) are made from wood.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gay Ann Spahn whose telephone number is (571)-272-7731. The examiner can normally be reached on Monday through Friday, 10:30 am to 7:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard E. Chilcot can be reached on (571)-272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

GAS
Gay Ann Spahn, Patent Examiner
August 14, 2007


RICHARD E. CHILCOTE, JR.
SUPERVISORY PATENT EXAMINER